# REVISION OF THE MARINE TÆNIOGLOSSATE AND PTENOGLOSSATE MOLLUSCA OF NEW ZEALAND.

BY CAPTAIN F. W. HUTTON, F.G.S., HON. MEMB. LINN. Soc., NEW SOUTH WALES.

#### TÆNIOGLOSSA.

## Family. Tritonide.\*

Triton tritonis. Linnens, Syst. Nat., 2nd edition, 1222. T. variegatus, Lamarck, Anim. sans Vert., 2nd edition. Vol. IX., p. 623; Reeve, Conch. Icon., fig. 3. Tryon Man. Conch. Vol. III., p. 9, pl. 1; fig. 1, pl. 3; fig. 16, pl. 4; fig. 25.

Habitat.—Northern parts of the Auckland Province. Found also through the whole Indo-pacific region.

TRITON NODIFERUS, Lamarck, Anim. sans Vert., 2nd edition. Vol. IX., p. 624. T. australis, Lam. l.c. Vol. IX., p. 625; Reeve, Conch. Icon, fig. 12. T. saulice, Reeve, l.c., fig. 17. Tryon, Man. Conch. Vol. III., p. 10, pl. 1, fig. 2-3, pl. 3, fig. 17, pl. 4, fig. 23.

Habitat.—North Island as far as South Napier, and at Chatham Island. Found also in Australia, Japan, and other places.

Linneus, Syst. Nat., edition. XI., p TRITON OLEARIUM. 748; Reeve, Conch. Icon., fig. 32. T. succinctum, Lamarck. Anim. sans. Vert., 2nd edition. Vol. IX., p. 628; Homb.

<sup>\*</sup> The following species has been omitted:-Triton fusifornis, Kiener; inhabits Australia.

and Jacquinot, Voy. Pole Sud., pl. 25, fig. 3. Tryon Man. Conch. Vol. III., p. 11, pl. 3, fig. 19, pl. 4, fig. 24; pl. 5, fig. 27-29; pl. 6, fig. 37. *T. acclivis*, Hutton, Cat. Marine Moll. of New Zealand, p. 13.

Habitat.—Auckland.

Found in Australia, Polynesia, and various parts of the world.

Triton spengleri. Lamarck, Anim. sans Vert., 2nd edition. Vol. IX., p. 627, Reeve, Conch. Icon., fig. 36; Quoy and Gaimard, Voy. Astrolabe, Zool., Vol. II., p. 583, pl. 40, figs. 1-2; Tryon, Man. Conch., Vol. III., p. 16, pl. 9, fig. 61.

Habitat.—Throughout New Zealand, and at the Chatham Islands. Found also in Australia and Tasmania.

RANELLA LEUCOSTOMA. Lamarck, Anim. sans Vert., 2nd edition. Vol. IX., p. 542; Reeve, Conch. Icon., fig. 4; Quoy and Gaimard, Voy. Astrolabe, Zool., Vol. II., p. 546, pl. 40, figs. 3-5. Tryon, Man. Conch., Vol. III., p. 42, pl. 23, figs. 53-54.

Habitat.—North Island of New Zealand, and Martin's Bay in the South Island.

Found also in Australia and Tasmania.

RANELLA ARGUS, Gmelin; Reeve, Conch. Icon., fig. 12; Tryon, Man. Conch., Vol. III., p. 44, pl. 24, figs. 61-65. R vexillum, Sowb. Pro. Zool. Soc., 1841, p. 51; Reeve, Conch. Icon., fig. 13. Hombron and Jacquinot, Voy. Pole Sud. Zool., Vol. V., p. 115, pl. 25, figs. 38-39. Bursa proditor, Franenfeld, Reise der Novara, Moll., pl. 1, fig. 1. B. tumida, Dunker, Novit. Conch., pl. 11, fig. 8.

Habitat.—Auckland to Stewart's Island.

Found also in Tasmania, Chili, St. Paul's Island, and the Cape of Good Hope.

Family. Dolide.

Dolium variegatum. Lamarck, Anim. sans Vert., 2nd edition. Vol. X., p. 143; Reeve, Conch. Icon., fig. 7.

Habitat.—North Cape to Tauranga.

Found also in Australia.

Cassis Pyrum. Lamarck, Anim. sans Vert., 2nd edition. Vol. X., p. 33; Reeve, Conch. Icon., fig. 29. *C. striatus*, Hutton, Cat. Tertiary Moll. of New Zealand, p. 8 (Young.)

*Habitat.*—North Island of New Zealand and Martin's Bay in the South Island.

Found also in Australia and Tasmania.

Cassis achatina. Lamarck, Anim. sans Vert, 2nd edition. Vol. X., p. 33; Reeve, Conch. Icon., fig. 28.

 ${\it Habitat.}$ —North parts of Auckland Province.

Found also in Australia and the Cape of Good Hope.

Family. LAMELLARIIDÆ.

Coriocella opinone. Gray, Pro. Zool. Soc., 1849, p. 169.

Habitat.—Auckland.

LAMELLARIA CEREBROIDES. Hutton, Trans., New Zealand Institute, Vol. XV., p. 122 (1883.)

Habitat.—Dunedin.

Family. Naticidæ.

Natica neozelanica. Quoy and Gaimard, Voy. Astrolabe, Zool. II., p. 237, pl. 66, figs. 11-12; Reeve, Conch. Icon., fig. 90. Habitat.—Throughout New Zealand.

NATICA AUSTRALIS. Hutton, Jour. de Conch., 1878, p. 23 (Lunatra.)

Habitat .-- Auckland.

The operculum is calcareous (Cheeseman, M.S S.)

NATICA VITREA. Hutton, Cat. Marine Moll. of New Zealand, p. 21 (1873.) *N. amphiala*, Watson, Linn. Soc. Jour., Zool. XV., p. 261 (1881.)

Habitat.—Stewart's Island and the Chatham Islands.

The operculum is horny.

Family. Turbonillidæ.

Turbonilla neozelanica. Hutton (Chemnitzia) Cat. Marine Moll. of New Zealand, p. 22 (1873.) Habitat.—Throughout New Zealand.

Perhaps identical with *Turbonilla nitida*, Angas, from South Australia,

Aclis (Rissopsis Hyalina. Hutton, New Zealand Journal of Science II., p. 173 (1884.) Shell thin, hyaline, white or brownish, darker at the apex, smooth, polished; apex blunt, whorls 5 or 6, rather flattened, the suture well washed, Aperture ovate, acuminate posteriorly; columella smooth, slightly recurved anteriorly.

Length, 0.1 inch.

Habitat,-Stewart Island.

Odostomia lactea. Angas, Pro. Zool. Soc., 1867, p. 112, pl. 13, fig. 11.

Habitat.—Throughout New Zealand.

Found also in Australia.

Family. Pyramidellidæ.

OBELISCUNS ROSEUS. Hutton, Cat. Marine Moll. of New Zealand, p. 22 (1873.)

Habitat.—Stewart's Island.

Family. CYPRÆIDÆ.\*

Trivia australis Lamarck, Anim. sans Vert., 2nd edition. Vol. X., p. 545; Reeve, Conch. Icon., fig. 138. Gray, Figs. Moll. Anim., Vol. I., pl. 34, fig. 7.

Habitat.—North Island of New Zealand. Found also in Australia and Tasmania.

TRIVIA EUROPÆA, Mont. *C. coccinella*, Lamarck, Anim. sans Vert., 2nd edition. Vol. X., p. 544; Reeve, Conch. Icon., fig. 129.

Habitat.—North Island of New Zealand.

<sup>\*</sup> The following species have been omitted:—

Cypræa punctata, Linnæus; inhabits the Philippines.

Cypræa annulus, Linnæus; inhabits Polynesia.

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Found also in Europe, &c., and fossil in the miocene beds at Table Cape, Tasmania.

Family. Cancellaride.\*

CANCELLARIA TRAILLI. Hutton, Cat. Marine Moll. of New Zealand, p. 26 (1873.)

Habitat.—Stewart's Island.

## Family. TRICHOTROPIDÆ.

TRICHOTROPIS INORNATA. Hutton, Cat. Marine Moll. of New Zealand. p. 26 (1873). T. clathrata, Sowerby in Reeve's Conch. Icon., fig. 10 (1874); Voy. Erebus and Terror, Moll., pl. 1, fig. 21 (1874.)

Habitat.—Throughout New Zealand, and at the Chatham Islands.

# Family. CERHTHUDÆ.†

BITTIUM TEREBELLOIDES. Martens, Critical List of the Moll. of New Zealand, p. 26 (1873.) *C. cinctum*, Hutton, Cat. Marine Moll. of New Zealand, p. 27 (1873.)

Habitat.—Throughout New Zewland.

BITTIUM EXILIS. Hutton, Cat. Marine Moll. of New Zealand, p. 27 (1873), and Trans. New Zealand Inst. Vol. XVI., p. 214.

Habitat.—Auckland and Stewart's Island.

Triphoris angasi. Crosse, Jour. de Conch., 1865, pl. 1, figs. 12-13.

C. minimus, Hutton, Cat. Marine Moll. of New Zealand, p. 27 (1873.)

Habitat.—Throughout New Zealand. Found also in Australia.

\* The following species has been omitted:—

\* Cancellaria ampullacera, Lesson.

† The following species have been omitted:—

Cerithium bicolor, Hombron and Jacquinot. Cerithium striatum, Hombron and Jacquinot. Cerithium nigrum, Homb. and Jacq.; no description, Cerithium australe, Quoy and Gaimard. TRIPHORIS GEMMULATUS. Adams and Reeve, Voy. Samarang, Moll., p. 46.

Habitat.—New Zealand (Martens). I have seen no specimens.

CERITHIDEA ALTERNATA Hutton, Cat. Marine Moll. of New Zealand, p. 26, (1873).

Habitat.—Tauranga.

CERITHIDEA BICARINATA. Gray, in Dieffenbach's New Zealand, Vol. II., p. 241 (1843); Voy. Erebus and Terror, Moll., pl. 1, fig. 20. *C. lunulentum*, Kein, Mon. Cerith., pl. 23, fig. 1. *Habitat.*—North Island, and Bank's Peninsula.

CERITHIDEA TRICARINATA. Hutton, New Zealand Journal of Science. Vol. I., p. 477 (1883); Trans. New Zealand Institute, Vol. XVI., p. 214, (1884).

Habitat.—Tauranga.

CERITHIDEA SUBCARINATA. Sowerby; Reeve, Conch. Icon., fig. 28 (1866). *C. australis*, Gray, in Dieffenbach's New Zealand. Vol. II., p. 241 [not of Lamarck].

Habitat.--Throughout New Zealand, and at the Chatham Islands.

## Family. APORRHAIDE.\*

Struthiolaria papulosa. Martyn, Univ. Conch., pl. 54 (1784).

Murex pes-struthiocameli, Chemnitz, Conch. Cab., Vol. X., figs.
1520-21 (1788). Murex stramineus, Gmelin, 13th edition
Linné's Syst. Nat. S. nodulosa, Lamarck, Anim. sans Vert.,
2nd edition. Vol. IX., p. 524. S. papulosa and S. vermis,
Reeve, Conch. Icon., figs. 3 and 4 [not of Mavtyn]. S. gigas,
Sowerby, Chenu, fig. 1651.

Habitat.—North Island of New Zealand, and Cook's Straits.

<sup>\*</sup> The following species are omitted:—

Struthiolaria tricarinata, Lesson; not recognised.

Struthiolaria scutulata, Martyn; inhabits Australia.

STRUTHIOLARIA VERMIS. Martyn, Univ. Conch., pl. 53 (1784).

Kiener's, Mon. Struth., pl. 2, fig. 3. S. australis, Gmelin, in 13th edition, Linne's Syst. Nat.: Reeve, Conch. Icon., fig. 1. S. crenulata, Lamarck, Anim. sans Vert, 2nd edition. Vol. IX., p. 533; Quoy and Gaimard, Voy. Astrolabe, Zool., Vol. II., p. 430, pl. 31, figs. 7-9. S. inermis, Sowerby, Thes., Conch., Vol. I., fig. 12.

Habitat.—North Island of New Zealand, and Cook's Straits. Very rare south of Cook's Straits.

## Family Calyptride.

Galerus Neozelanicus. Lesson (Sigapatella), Voy. Coquille, Zool., Vol. II., p. 395 (1830). *Crepidula maculata*, Quoy and Gaimard, Voy. Astrolabe, Zool., Vol. III., p. 422, pl. 72, figs. 6-9; Reeve, Conch. Icon., fig. 15.

Habitat.—Throughout New Zealand.

Galerus scutum. Lesson (Sigapatella), Voy. Coquille, Zool., Vol. II., p. 395 (1830). *Trochita tenuis*, Gray, Pro. Zool. Soc., 1867, p. 735.

Habitat.—Throughout New Zealand.

CREPIDULA COSTATA. Sowerby, Genera of Shells, fig. 3. Quoy and Gaimard, Voy. Astrolabe, Zool., Vol. III., p. 414, pl. 72, figs. 10-12; Reeve, Conch. Icon., fig. 21.

Habitat.—North Island of New Zealand.

CREPIDULA MONOXYLA. Lesson, Voy. Coquille, Zool., Vol. II., p. 391. *C. contorta*, Quoy and Gaimard, Voy. Astrolabe, Zool., Vol. III., p. 418, pl. 72, figs. 15-16. *Crypta profunda*, Hutton, Cat. Tertiary Moll. of New Zealand, p. 14 (1873).

Habitat.—Bay of Islands to Auckland.

CREPIDULA UNGUIFORMIS. Lamarck, Anim. sans Vert., 2nd edition, Vol. VIII., p. 642; Reeve, Conch. Icon., fig. 1.

Habitat.—Throughout New Zealand. World wide.

HIPPONYX (AMALTHEA) AUSTRALIS. Lamarck, Anim. sans Vert. Vol. VI., p. 335. Quoy and Gaimard, Voy. Astrolabe, Zool. Vol. III., p. 434, pl. 72, figs. 25-34.

Habitat.—Throughout New Zealand, and the Chatham Islands. Found also in Australia.

## Family. Turritellide.

Turritella Rosea. Quoy and Gaimard, Voy. Astrolabe, Zool. Vol. III., p. 136, pl. 55, figs. 24-26 (1834); Reeve, Conch. Icon., fig. 41.

Habitat.—Throughout New Zealand, and in the Chatham Islands.

Turritella vittata. Hutton, Cat. Marine Moll. of New Zealand, p. 29, (1873).

Habitat.—North Island of New Zealand.

Turritella fulminata. Hutton, Cat. Marine Moll. of New Zealand, p. 29 (1873).

Habitat.—Northern part of the Auckland Province.

Turritella carlottæ. Watson, Linn Soc. Jour. Vol. XV., p. 222 (1880).

Habitat.—Queen Charlotte's Sound.

TURRITELLA PAGODA. Reeve, Conch. Icon., fig. 60 (1849).

Habitat.—Northern Part of the Auckland Province.

Turritella tricincta. Hutton, Cat. Tertiary Moll. of New Zealand, p. 13 (1873). Eglisia symmetrica, Hutton Cat. Marine Moll. of New Zealand, p. 30 (Young). Turritella rosea, Mantell, Quar. Jour. Geol. Soc., Vol. VI., pl. 28, fig. 16, (1850).

Habitat.—Lyttelton Harbour; Stewart's Island.

Eglisia Plicata. Hutton, (Rissoa) Cat. Marine Moll. of New Zealand, p. 29 (1873).

Habitat.—Auckland and Stewart's Island.

#### Family. RISSOIDE.\*

RISSOINA (EATONIELLA) OLIVACEA. Hutton, (Dardania), Trans. New Zealand Institute. Vol. XIV., p. 147, pl. 1, fig. k, (1882).

Habitat.—Lyttleton.

Shell ovate, smooth, very dark brown when dry; aperture not continuous.

Length, 0.08 inch.

RISSOINA ANNULATA. Hutton, New Zealand Jour. of Science. Vol. II., p. 173 (1884).

Habitat, -Auckland

Shell ovate, smooth, brown, often with a paler band just below the suture. Whorls 5, slightly rounded, the suture well marked Aperture rounded, continuous in the adult.

Length, 0.08 inch.

Distinguished from B purpurea by its shape and better marked sutures.

RISSOA RUGULOSA. Hutton, Cat. Marine Moll. of New Zealand, p. 28 (1873.) Eulima chathamensis, Hutton, l.c., p. 23.

Habitat.—Throughout New Zealand and at the Chatham Islands. According to Mr. Justice Gillies it is the same as R. variegata, Angas, from Australia.

Our largest species, elongately curved, white or yellowish white. The spire whorls are longitudinally ribbed, but the body whorl is smooth.

Length, 0.3 inch.

RISSOA PURPUREA. Hutton, Cat. Marine Moll. of New Zealand, p. 29 (1873.) R. subfusca, Hutton, l.c., p. 28.

Habitat.—Stewart's Island.

Shell subulately elongated, yellowish with a purple spire, and a white band below the suturs, apertures rounded, continuous.

Length, 0.12 inch.

<sup>\*</sup> The following species has been omitted:-Rissoa fasciata, Adams; inhabits Australia.

RISSOA IMPOLITA. Hutton, Cat. Marine Moll. of New Zealand, p. 29 (1873.)

Habitat.—Stewart's Island.

Shell conoidal, white, whorls flattened, finely spirally striated; sature small.

Length, 0.1 inch.

RISSOA NANA. Hutton, Cat. Marine Moll. of New Zealand, p. 28 (1873.)

Habitat.—Stewart's Island and Auckland.

Shell oval, spire short and blunt; whorls longitudinally ribbed. Length, 0·1 inch.

RISSOA ROSEA. Hutton, Cat. Marine Moll. of New Zealand, p. 29 (1873.)

Habitat.—Stewart's Island.

Shell ovate, pink; whorls rather flat; mouth not continuous. Length, 0.07 inch.

RISSOA FLAMMULATA. Hutton, Jour. de Conch., 1878, p. 28.

Habitat. - Auckland.

Shell turbinately conical, polished red with oblique white rays; aperture not continuous.

Length, 0.25 inch.

RISSOA LIMBATA. Hutton, New Zealand Journal of Science. Vol. I., p. 477 (1883); Trans. New Zealand Institute. Vol. XVI., p. 214 (1884).

Habitat.—Auckland.

Shell turbinately conical, polished; ashy brown with white spots at the suture.

Length, 0.11 inch.

## Family. LITTORINIDE,\*

LITTORINA CINCTA. Quoy and Gaimard, Voy. Astrolabe, Zool. II., p. 481, pl. 33, fig. 20-21 (1833); Reeve, Conch. Icon.,

<sup>\*</sup> The following species have been omitted:—
Littorina vilis, Menke.
Littorina nove-zealandive, Reeve.
Risella melanostoma, Gmelin; inhabits Australia.
(R. Kielmansegge, Frankf.)

fig. 53. L. angulifera, Gould, Otia Conch., p. 55 (1846.) L. luctuosa; Reeve, Conch. Icon., fig. 65 (1857.)

Habitat.—Throughout New Zealand, and the Chatham Islands.

LITTORINA MAURITIANA. Lamarck, Anim. sans Vert. L. dimenensis, Quoy and Gaimard, Voy. Astrolabe, Zool. II., p. 479, pl. 33, fig. 8-11; Reeve, Conch. Icon., fig. 94 (1833). L. antipodum, Philippi, abbild. a Berch. Conch. Littorina, p. 195, tab. Vol. IV., fig. 2 (1847).

Habitat.—Throughout New Zealand and at the Chatham Islands. Found also in Tasmania, Australia, and the Mauritius.

This species is quite distinct from L. neritoides, L, and I suppose therefore that Tenison-Wood is wrong in uniting it with L. cærulescens. Lam.

Fossarina varius. Hutton, Cat. Marine Moll. of New Zealand, (Aderorbis) p. 35 (1873).

Habitat.—Throughout New Zealand, and at the Chatham Islands.

# Family. VERMETIDÆ.

Vermetus (Bivonia) neozelanicus. Guoy and Gaimard, Voy. Astrolabe, Zool. Vol. III., p. 293, pl. 67, figs. 16-17 (1833). *Habitat*.—Throughout New Zealand.

Vermetus (Siphonium) lamellosus. Hutton, Cat. Marine Moll. of New Zealand, p, 30 (1873).

Habitat.—Cook's Straits in deep water.

VERMETUS (STREPHOPOMA) ROSEUS. Quoy and Gaimard, Voy. Astrolabe, Zool. Vol. II., p. 300, pl. 67, figs. 20-24.

Habitat.—Hauraki Gulf.

Siliquaria australis. Quoy and Gaimard, Voy. Astrolabe, Zool. Vol. II., p. 302; Chenu, Man. Conch., figs. 2, 3, 10.

Habitat.—Hauraki Gulf.

Found also in Australia. Doubtfully identified.

#### PTENOGLOSSA.

Family. SCALARIDÆ.

Scalaria zelebori. Frauenfeld, Reise der Novara, Moll., p. 1, fig. 6 (1867.)

Habitat.—Auckland, Stewart's Island.

Varices 12-13; distinct spiral ribs, body whorl keeled.

Scalaria Jukesiana. Forbes, Voy. Rattlesnake, App., p. 383, fig. 7. S. wellingtonensis, T. W. Kirk, Trans. New Zealand Inst. Vol. XIII., p. 307 (1882.)

Habitat.—North Island of New Zealand.

Found also in Australia and Tasmania.

Varices 17-20; no spiral ribs, no ridges on the body whorl; pure white.

Scalaria tenella. Hutton (1885.) S. lineolata, Cat. Marine Moll. of New Zealand, p. 22 [not of Keiner.] S. Gra., Man. New Zealand, Moll., p. 70 [not of Sowerby.]

Habitat.—Auckland.

Varices about 20 in the body whorl; no spiral ribs; white with a pale brown band on the anterior part of the body whorl. Not so acute as the last species,

# Family. Onustide.

XENOPHORA CONCHYLIOPHORA. Born; Phorus agglutinans, Lamarck, Anim. sans Vert. Vol. IX., p. 161.

Habitat.—Hauraki Gulf (Cheeseman).

Found also in the West Indies.

## Family. Solaridæ.

Solarium Luteum. Lamarck, Anim. sans Vert., 2nd edition. Vol. IX., p. 100; Reeve, Conch. Icon, fig. 14.

Habitat.—Auckland (Mathews), Wellington (Kirk.)

Found also in Australia and the Mediterranean Sea.

#### Family. JANTHINIDÆ.

Janthina communis. Lamarck, Anim. sans Vert 2nd edition. Vol. IX., p. 4; Reeve, Conch. Icon.. fig. 5.

Habitat.—North Island of New Zealand.

Found also in Australia.

JANTHINA IRICOLOR. Reeve, Conch. Icon., fig. 23.

Habitat.—North Island of New Zealand.

Janthina exigua. Lamarck, Anim. sans Vert., 2nd edition. Vol. IX, p. 5; Reeve, Conch. Icon., fig. 21.

Habitat.—Throughout New Zealand and at the Chatham Island. Found also in Australia.

#### NOTES AND EXHIBITS.

Dr. Cox read the following letter from Mr. Benjamin Hinde, R.N., of H.M.S., Diamond, on the poisonous effects of the bite inflicted by the *Conus Geographicus*, Linn. on the natives of New Britain:—

#### "H.M.S. DIAMOND,

" At Sea, Lat. 10° 14' S., Long. 155° 34' E.

"The following facts which I have learned partly by hearsay, and partly by personal observation, concerning the shell, known as Conus Geographus, of Linnaus, may be of interest.

"What first drew my observation to this curious power of C. Geographus was, a native of Nodup, New Britain, an interpreter on board H.M.S. Diamond, seeing me with a specimen of C. Geographus in my hand, remarked, "suppose he bite he kill man." Thinking this to be an exaggeration on the part of the native, but at the same time thinking that he must have some reason for so saying, I enquired of him more particularly as to how the shell would harm any one, as at the time I fancied that he meant if the edge of the shell cut a person by accident it would cause blood poisoning, however, he described how that the fish would bite and that the bite was poisonous, and that it always killed people if they did not cut themselves to let the blood run, all round the place bitten, he also promiseed to procure me a live specimen and shew me how it bit.

"This promise he carried out as nearly as he could for he brought me the shell, but said when he went to take it up the animal had retired or rather, commenced to retire into its shell when he cut off the head, which he brought me separated from the shell. The shell he brought was about 5 inches in length.

"Some time afterwards being in conversation with a Mr. R. Parkinson, a New Britain Cotton Planter, I enquired if he knew any thing of this man's statement about this *Conus*. He told me that he believed it to be perfectly true, and that he had written about it to some one in Sydney.

"I should have taken no more notice of the statement but for the fact, that I saw myself, a native, on the Island of Matupi, Blanche Bay, New Britain, who had been bitten by one, and who had at once cut small incisions with a sharp stone all over his arm and shoulder from which the blood had flowed freely, and he explained to me that if he had not taken these precautions that he would have died. He explained to me also the shell and how he had been bitten (there was a small mark about the size of a threepenny piece) between his finger and thumb, but upon close examiantion there were two small incisions in the centre but from which evidently no blood had come.

"I may mention that to stop the bleeding of the numerous cuts in his arm and shoulder, hot wood ashes had been put on them, and the arm seemed to be stiff and useless for the time. But whether this was the effect of the bite or the cure I really am unable to state.

"Many natives whom I questioned, (shewing them the shell at the same time) said that the bite was deadly.

"Hoping that these few observations may be of use either as information, or conformation to Conchologists generally.

"BENJ. HUGH HINDE, R.N."

Dr. Cox stated that an instance had been recorded by Mr. Arthur Adams of a poisoned wound produced by the bite of *Conus aulicus*, Linn. The Rev. W. Wyatt Gill had recorded the fatal effects of the bite of the *Conus textilis*. Linn., and Mr. Brazier

had informed Dr. Cox that he had known severe effects caused by the bite of the *Conus tulipa*. Linn. This was the first instance Dr. Cox had heard of the poisonous effects of *Conus Geographicus*.

Dr. Cox exhibited a collection of Fibres, obtained by maceration from the bark of indigenous trees growing on the Northern rivers of N.S.W. Also, two distinctly banded specimens of *Helix Angasiana* collected by the President on the Barrier Ranges; and a new species of Land Shell from New Britain, which he had obtained from Mr. Hinde of H.M.S. Diamond, and which he proposed to call *Cochlostyla Hindei*. The type specimen is in the Australian Museum.

Mr. H. Gilliat exhibited a Stone Implement which had been found near the Darling above Wilcannia. It is 17 inches long and  $1\frac{3}{4}$  inch in diameter, one end being pointed and the other nearly flat, slightly concave. The use of this implement is not understood by the natives at present living in the district; but it is believed to have been employed as a roller or pestle for crushing the nardoo seed. It is somewhat similar in shape to the one which was recently exhibited from the Walgett district.

The President exhibited several interesting specimens of Argentiferous Lead Ores and Chloride of Silver from the lodes in the Barrier Ranges.

Mr. Masters exhibited specimens of six extremely rare Australian Beetles, viz.:—Aulacopsis Reichei, Schizorhina Digglesii, Cacostomus squamosus, Stigmodera Chevrolati, Megamerus Kingii, and a species of Mecomastix.

Mr. Gervase F. Mathew, F.L.S., of H.M.S. Espiegle exhibited a number of remarkably perfect and beautiful specimens of *Papilio Godefiroyi*, Semp. from Samoa, and of *P. Schmeltzi*, Herr. Schaff., from Fiji, which he had reared at sea from larvæ obtained at these Islands, and fed on the leaves of a species of *Aralia*. He exhibited also the ova, pupa, and larvæ of each insect, and mentioned that these stages had not previously been observed.

## WEDNESDAY, 29TH OCTOBER, 1884.

The President, C. S. Wilkinson, Esq., F.L.S., F.G.S., in the chair.

The Rev. T. Wyatt Gill, H. B. Brady, Esq., F.R.S., F.L.S., J. Harris, Esq., and T. W. David, Esq., B.A., F.G.S., were introduced as visitors.

#### MEMBERS ELECTED.

Leopold F. Woolrych, Esq., of Newtown; Mons. Jean Lison, Analytical Chemist, of Noumea, New Caledonia.

#### DONATIONS.

- "Reistochen naar de Geelvinkbaai op Nieuw Guinea in den Jahren 1869-70, door G. B. H. von Rosenberg," 4to, 1875. From Baron N. de M-Maclay.
- "Science," Vol. IV., Nos. 78 to 84, August 1st to September 12th, 1884. From the Editor.
- "Bulletin of the Museum of Comp. Zool., at Harvard College, Cambridge, Mass." Vol. XI., No. 10. From the Museum.
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